

CONDITIONAL CONFIGURATIONS FOR INTERGOVERNMENTAL ENVIRONMENTAL COLLABORATION IN URBAN AGGLOMERATIONS

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Abstract. This research investigates how the conditional elements in combination drive interlocal collaborative activities regarding air pollution control in urban agglomerations in China. By applying a multiple-value qualitative comparative analysis, findings indicate that interlocal environmental collaboration requires two necessary conditions: informal intergovernmental relations and intervention by higher authorities, combined with either balanced power structures or a history of collaboration. Furthermore, case-based comparative analyses indicate that, first, although personalized, non-institutionalized superior intervention may be effective in initiating collaboration. Institutionalized mechanisms should also be enforced to advance the formation of designed organizations and mitigate policy inconsistencies brought by leadership rotation. Second, lasting collaborative environmental governance requires the conditions of informal intergovernmental relations and self-organized networks, which are conventionally developed from designed networks through planned leadership transfers. Third, among China's local governments, selective benefits (i.e., individual interest) and the distribution of benefits may be more decisive in the formation of environmental collaboration than the integral improvement of collective benefits. It is necessary for tactical sub-regionalism based on partially integrated benefits and preferences to reduce the transaction costs of collaboration, especially in urban agglomerations with two or more dominant leaders.

Keywords: *intergovernmental collaboration, air pollution control, configurational analysis, qualitative comparative analysis, urban agglomeration, China.*

Reikšminiai žodžiai: *Tarpyvyriausybiniis bendradarbiavimas, oro taršos kontrolė, konfigūracinė analizė, kokybinė lyginamoji analizė, miestų aglomeracija, Kinija.*

Introduction

There has been extensive analysis of the antecedents or conditions of intergovernmental collaboration (O’Leary and Vij 2012; Bianchi et al. 2021). Explanatory frameworks of collaboration have incorporated conditional variables ranging from informal elements (e.g., facilitative leadership, trust, commitment, shared objectives, and responsibilities) to formal organizational factors (e.g., protocols, rules, structures, platforms, and roles) to explain why some circumstances generate a collaborative outcome while others do not (Thomson and Perry 2006; Ansell and Gash 2008; Provan and Kenis 2008; Emerson et al. 2012). Furthermore, convincing arguments have been proposed for research agendas in which these factors are intertwined and work together to build collaboration, requiring a synthetic explanation to investigate the combined effects of collaborative conditions (Sedgwick 2017; Liu et al. 2021).

Institutional collective action (ICA) theory proposes an integrative analysis framework of the collaboration process by assuming collaborative outcomes are determined by net expected benefits that reflect the differences between anticipated gains and potential costs when participating in collaborative governing networks (Feiock 2007; Feiock 2013; Kim et al. 2022). In this regard, there arises an important research issue as to how these collaborative conditions interact and combine to gain positive net benefits and achieve intended collaborative practice.

This research issue is important and challenging in the context of China, not only because of the unverified transferability of integration mechanisms for overcoming ICA dilemmas developed in the Western context (Kim et al. 2022, but also because of China’s unique regime of authoritarian environmentalism and its top-down hierarchical control system (Li and Wu 2018; Liu et al. 2021). To inspire local officials’ environmental preferences, China’s central authority has enforced an environmental target responsibility system and introduced ecological indicators to the official ranking tournament since 2007 (Zhang and Yan 2022). With insufficient public participation, the local government’s incentive to participate in environmental collaboration depends more on the enhancement of political promotion (selective benefits) than on the scale effects of environmental improvement (collective benefits). Consequently, benefit distribution could be more decisive in environmental collaboration than benefit enhancement among Chinese localities, as well as in the Western context (Wang 2014). Furthermore, the widely and frequently applied non-institutionalized (or personalized) superior intervention has detracted from the certainty and consistency of top-down policy guidance regarding local environmental governance

(Zhang and Wang 2022). Consequently, additional interlocal relation capitals and self-organized networks are required to reduce transaction costs and risks and to avoid defection problems in collaboration (Yi et al. 2024). In addition to the well-established “competing for growth” structure of interlocal relations, it is vitally important to identify the latent elements and their combinations that facilitate mutual trust and self-organization among Chinese local governments.

This research conducts a configurational analysis of the major factors affecting interlocal collaborations in China, based on a sample of 20 national-level urban agglomerations from 2012 to 2018. We extracted five explanatory variables that were proved to facilitate environmental collaborative practice in relevant studies (Ansell and Gash 2008; Emerson et al. 2012; Liu et al. 2021), including the intervention of a superior level of authority, a pre-history of coordination or cooperation, shared common knowledge, informal intergovernmental relations, and power imbalance. A qualitative comparative analysis (QCA) was then conducted to investigate the combinations of these five preconditions for the achievement of interlocal environmental collaboration. The QCA reported two prominent variables (informal intergovernmental relations and strong superior intervention) and produced four optimal composite paths that lead the collaborative conditions to intended practices. The findings are discussed by referring to the activities of urban clusters in their collaborative environmental governance.

Research design

Method

Evidence from current case studies shows that the impacts of collaborative conditions are intertwined and should be examined synthetically as to how they combine to facilitate collaborative practice (Emerson et al. 2012; Liu et al. 2021; Rifaid et al. 2023). Therefore, this research applies a multi-value qualitative comparative analysis (mvQCA) methodology to capture and examine the combined effects of these conditional factors. The QCA method describes cases as configurations of conditions and uses Boolean minimization processes to link causal conditions to an outcome (Ragin 2000; Sedgwick 2017). The mvQCA is a type of QCA analysis in which conditions and outcomes can be assigned multiple values to indicate their categorized status.

Samples

We introduced 20 national-level urban agglomerations into our mvQCA analysis (shown in Table 1). Besides the 19 urban agglomerations that were designated in the 13th national Five-Year Plan, our research sample also includes the Changsha-Zhuzhou-Xiangtan city cluster, as it was the initial pilot area of a two-oriented society reform

(resource-saving and environment-friendly) approved by the State Council in 2007. These urban agglomerations are designated by the central government based on the interactive relationships among cities in economic, humanistic, and social domains, and they serve as the foundation for promoting intergovernmental cooperation policies, including those related to environmental protection.

Measures

The outcome is a dependent variable that measures whether or not an urban agglomeration has established intergovernmental collaboration (*COLL*) regarding air pollution control. There could be various patterns of collaborative environmental governance, ranging from informal collaboration achieved by personal interaction to formal collaboration based on an organizational entity or legal agreement (Yi et al. 2018; Liu et al. 2021). Given that almost all the cities interact with each other in various informal ways, and it is, therefore, hard to identify the difference in collaboration status, we only consider formal mechanisms of collaboration. The outcome variable *COLL* is set to 1 if an urban agglomeration has built one of these formal collaborative practices, and 0 otherwise, as shown in Table 1.

According to the ICA theory, motivation for governments to collaborate in environmental governance derives from the collective benefits shared by all participants by producing efficiencies and outcomes of scale in the integral environmental improvement, as well as by internalizing spillover problems and the selective benefits for the advancement of individual interests (political and career incentives) of local officials (Feiock 2007). Collaborative practice may also be impeded by transaction costs, mainly reflected as information costs and negotiation costs at the early stage of collaboration, and by the potential risks arising from coordination, division, and defection issues throughout the collaborative process (Feiock 2007; Feiock 2013). By reviewing pertinent literature, we have identified five explanatory variables that influence the progression of gains/benefits or the mitigation of costs/risks associated with environmental collaborative practices: the intervention of a superior level of authority, a prehistory of coordination or cooperation, shared common knowledge, informal intergovernmental relations, and power imbalance. The following measurements are employed to assess these five conditional factors.

- Intervention of superior-level authority (*SUPE*) is the first conditional variable measuring the degree to which superior levels of government promote or even participate in the formation of interlocal collaboration. Higher-level authorities can intervene both institutionally and non-institutionally. The variable *SUPE* is set to 1 if the superior authorities have launched special plans on collaborative air pollution control, and 2 if they have also taken additional non-institutionalized measures.
- A prehistory of cooperation or collaboration (*HIST*) is the second conditional variable that captures the facilitating impact of prior experience of collaboration. Collaborative experience or capacity can be acquired in different ways. The variable *HIST* is set to 1 if an urban agglomeration has previously established a joint

- prevention mechanism or cooperation agreement on air or water pollution, and 0 otherwise.
- Shared common knowledge (*KNOW*) is the third conditional variable that measures both the salience of air pollution in an urban agglomeration and the difference in pollution levels among other cities in the region. We use the Air Quality Index (AQI) to proxy for the air pollution level for each city, and the average AQI to measure the overall air quality of an urban agglomeration. After calculating both the average AQI and the coefficient of variation of city-level AQI (taking the reciprocal) for each urban agglomeration, we use the SPSS system clustering command to divide the 20 samples into two categories: high shared common knowledge (*KNOW* = 1) and low shared common knowledge (*KNOW* = 0).
 - Informal intergovernmental relations (*RELA*) is the fourth conditional variable that measures the intensity of the inter-city social network established primarily by the interpersonal networks of city managers. Considering that collaboration cannot be established without the participation of the core cities in each region, we only consider the leadership transfer of chief officials between two core cities or between a core city and other cities within an urban agglomeration.
 - Power imbalance (*POWE*) is the fifth conditional variable that measures the structural status of each urban agglomeration. In China, each city has been designated different administrative levels and accordingly granted equivalent political discourse, resource capability, and external influence (Yi et al. 2018). In some urban agglomerations, all the cities are at the same administrative level, while in others, there will be one or two cities at a higher administrative level than their neighbors. The variable *POWE* is set to 0, 1, and 2 to indicate the number of cities with higher administrative levels within an urban agglomeration.

Table 1. A multi-value scale of the condition and outcome variables

Code	Case (urban agglomeration)	<i>COLL</i>	<i>SUPE</i>	<i>HIST</i>	<i>KNOW</i>	<i>RELA</i>	<i>POWE</i>
1	Beijing-Tianjin-Hebei	1	2	1	1	1	1
2	Yangtze River Delta	1	2	1	1	1	1
3	Pearl River Delta	1	1	1	1	1	2
4	Wuhan and the surrounding areas	1	2	1	1	1	1
5	Changsha-Zhuzhou-Xiangtan	1	2	1	1	1	0
6	Chengdu-Chongqing	1	1	1	1	1	1
7	Harbin-Changchun	0	0	0	0	0	2
8	Shandong	0	2	1	0	0	2

9	South Central Liaoning	0	0	1	1	0	2
10	West coast of the Taiwan Strait	0	1	0	0	0	1
11	Guanzhong region of Shaanxi	1	2	1	0	1	1
12	The central plains in Henan	1	2	0	1	1	0
13	Beibu Gulf	0	0	0	0	0	0
14	Northern slope of the Tianshan Mountains	1	2	0	0	1	0
15	Hohhot-Baotou-Ordos-Yulin	0	0	0	0	0	0
16	North Central Shanxi	1	2	1	1	1	0
17	City belt along the Yellow River in Ningxia	1	2	0	1	1	0
18	Lanzhou-Xining	0	0	0	0	1	2
19	Central Yunnan	1	2	1	0	1	0
20	Central Guizhou	0	1	0	0	0	0

Source: Authors.

Results

Analysis of single conditions

We conducted the analysis of single conditions by calculating the values of consistency and coverage of the outcome variables under different conditions. The results demonstrate that $RELA_1$ are the necessary conditions for the establishment of collaboration, as both the values of consistency and coverage are high (greater than 0.9). In addition, the values of consistency and coverage of $SUPE_0$ and $RELA_0$ are 0, indicating that the achievement of collaboration must be on condition of the intervention of a superior-level authority and informal intergovernmental relations. We also complement the ICA literature by demonstrating that an informal intergovernmental relationship is another fundamental condition facilitating collaboration. Interpersonal networks built from leadership transfer promote interlocal communication, develop mutual trust, and encourage peer support, all of which can bridge social capital for the formation of a self-organized network and reduce transaction costs or preconceived risks of collaboration.

Configuration analysis of the achievement of intergovernmental collaboration

In the configuration analysis, we used the intermediate solution produced by the mvQCA software to identify optimal configurations for the outcome variable of reaching interlocal collaboration. As shown in Panel A of Table 2, mvQCA reports four solutions for building collaborative practice. Three of the four solutions comprise multiple possibilities due to the different value statuses of condition variables, and most of the covered cases of

every solution are duplicated from each other. Therefore, we converted each of the three solutions to its simplified path with only one possibility and unique covered cases.

As results in Panel B show, $RELA_1$ and $SUPE_2$ are both the core and necessary conditions that contribute to the achievement of collaborative environmental governance, which is consistent with the examination of necessary conditions. The two configurations with high coverage (50% and 33.3%, respectively) contain both of these conditions. In summary, as for most of the urban agglomerations in China (10 out of 12), the combination of conditions for $COLL_1$ can be written as $RELA_1 * SUPE_2 * (POWE_0 + HIST_1 * POWE_1)$. This new configuration suggests that dyads need intense informal relations and strong superior intervention, and either a balanced network structure or one dominant actor combined with a prehistory of collaboration to achieve interlocal collaboration. Cases 6 (Chengdu-Chongqing) and 3 (Pearl River Delta) have one and two dominant actors within the regions, respectively. Under conditions of informal intergovernmental relations ($RELA_1$) and institutionalized superior intervention ($SUPE_1$), when there is an existing imbalanced power structure of a collaborative network, a high level of shared common knowledge ($KNOW_1$) has to be combined to establish collaboration.

Table 2. Configuration analysis of antecedents contributing to the achievement of intergovernmental collaboration

Configuration	Raw coverage	Covered cases	Solution coverage
Panel A: COLL ₁ : Intermediate solutions			
1. SUPE ₂ *HIST ₁ *RELA ₁ *POWE _{0,1}	0.583	1, 2, 4, 5, 11, 16, 19	1.0 (12/12)
2. SUPE ₂ *RELA ₁ *POWE ₀	0.5	5, 12, 14, 16, 17, 19	
3. SUPE _{1,2} *HIST ₁ *KNOW ₁ *RELA ₁ *POWE ₁	0.333	1, 2, 4, 6	
4. SUPE ₁ *HIST ₁ *KNOW ₁ *RELA ₁ *POWE _{1,2}	0.167	3, 6	
Panel B: COLL ₁ : Simplified configurations.			
1. RELA ₁ *SUPE ₂ *POWE ₀		5, 12, 14, 16, 17, 19	
2. RELA ₁ *SUPE ₂ *HIST ₁ *POWE ₁		1, 2, 4, 11	
3. RELA ₁ *SUPE ₁ *HIST ₁ *KNOW ₁ *POWE ₁		6	
4. RELA ₁ *SUPE ₁ *HIST ₁ *KNOW ₁ *POWE ₂		3	

Source: Authors.

Configuration analysis of failing to establish intergovernmental collaboration

In the configuration analysis of failing to establish collaboration ($COLL_0$), mvQCA produces four intermediate solutions, each of which contains all five conditions. As the results of the intermediate solutions are not concise enough to be adopted (Liu et al. 2021), we chose to use more logical residuals to obtain the parsimonious solutions, as reported in Panel A of Table 3. The second configuration comprises two possibilities for the actual path and has repeated covered cases with the third configuration, so we converted it to its simplified path with only one possibility and unique covered cases, as shown in Panel B. As discussed above, the initial analysis of necessary conditions demonstrates that both informal intergovernmental relations and superior interventions are necessary for collaboration. This finding is also reflected in the simplified configurations of failing to establish collaboration. As Panel B shows, among the eight cases failing to establish collaboration, 87.5% and 62.5% of these can be attributed to the absence of informal intergovernmental relations and superior intervention, respectively. Three of the eight cases have two dominant actors but low levels of shared common knowledge, and two have institutionalized superior intervention but no prehistory of collaboration.

Table 3. Configuration analysis of antecedents failing to establish interlocal collaboration

Configuration	Raw coverage	Covered cases	Solution coverage
Panel A: $COLL_0$: Parsimonious solutions			
1. $RELA_0$	0.875	7, 8, 9, 10, 13, 15, 20	1.0 (8/8)
2. $SUPE_{0,1} * HIST_0$	0.75	7, 10, 13, 15, 18, 20	
3. $SUPE_0$	0.625	7, 9, 13, 15, 18	
4. $KNOW_0 * POWE_2$	0.375	7, 8, 18	
Panel B: $COLL_0$: Simplified configurations			
1. $RELA_0$		7, 8, 9, 10, 13, 15, 20	
2. $SUPE_0$		7, 9, 13, 15, 18	
3. $KNOW_0 * POWE_2$		7, 8, 18	
4. $SUPE_1 * HIST_0$		10, 20	

Source: Authors.

Discussion

Institutionalized and campaign-style intervention of superior authorities

We propose an explanatory mechanism to distinguish and evaluate the different effects of superior intervention by dividing it into two patterns: institutionalized and non-institutionalized (or personalized). A cross-case analysis indicated that the achievement of environmental collaboration is dependent on the condition of superior intervention, and that urban agglomerations are more likely to build collaboration if there is personalized, top-down political motivation besides the general institutionalized guidance. These findings extend the explanatory mechanism of superior authorities by indicating stronger promoting effects of personalized intervention than those of institutionalized guidance. Personalized intervention is seen in actions such as keynote speeches or even in the direct participation of superior political officials in interlocal collaboration, operating in a pattern of campaign-style practice based on political motivation or ideological requirements (Liu et al. 2014; van der Kamp 2021). Such top-down campaigns can force local governors to set differences of perception and interest aside and quickly establish environmental collaboration.

The results of the configurational analysis also demonstrate that superior intervention cannot separately facilitate collaboration and that collaboration is achieved only by combining the conditions of intergovernmental self-organized networks and coordinated interest relations. In this regard, we also contribute to the debate regarding the functional fragmentation of superior authorities by indicating that personalized political intervention (widely and frequently used by Chinese authorities) could be insufficient due to deficiencies of certainty and consistency. For example, Jinan and Qingdao, two leading cities in long-standing competition in Shandong province, tried to establish collaboration in 2016 under the promotion of Guo Shuqing, the former governor of Shandong province. However, following an unanticipated turnover of provincial leadership in 2017, there have been no further documented collaborative activities between the two cities. Therefore, in addition to the non-institutionalized, campaign-style political motivations that initiate interlocal collaboration, institutional mechanisms should also be developed to advance the formation of designed organizations, the building of social capital, and the enforcement of collaborative plans. This can mitigate the policy fluctuations and inconsistency brought by leadership rotation and produce lasting effects from temporary personalized intervention (Emerson et al. 2012; Kim et al. 2022).

Informal intergovernmental relations and self-organized networks

Consistent with ICA theory that considers informal networks as the initiation of collaborative practice (Feiock 2007; Feiock 2013; Yi et al. 2018), we found that informal intergovernmental relations act as a fundamental conditional element in establishing environmental collaboration. Although the political invention of superiors temporarily motivates collaborative action, the transaction costs and risks remain and can even accumulate because more actors are involved. In this regard, lasting collaborative environmental governance

requires the condition of interlocal self-organized networks and organizations. Established informal intergovernmental relations can mitigate transaction costs by facilitating joint understanding and objective integration, promoting policy learning and transfer, and coordinating complex decisions within the formal structure (Feiock 2013; Keast and Mandell 2014). Our findings from China suggest an effective strategy for fostering informal interregional connectivity in a broader context: the establishment of social networks grounded in interpersonal and informal interactions. Beyond the exchange programs for officials across jurisdictions, collaborative projects, including public welfare initiatives that engage officials from multiple regions, can expand the horizon of ego actors in selecting potential partners, accumulate social capital and trust, and lay the foundation for future environmental cooperative endeavors among regions.

The findings also enrich the study literature on the interaction between self-organized networks and designed networks, the two ways of forming intergovernmental networks and facilitating interlocal collaborations (Yi et al. 2024). The results demonstrate that all urban agglomerations that have established environmental collaboration have at least one chief official transferred between the constituent cities. On one hand, leadership transfer can create links between officials in the separate administrative locations they serve, and so promote the formation of informal intergovernmental relations and self-organized networks (Yi and Chen 2019). On the other hand, in China, the appointment of chief officials at a subnational level is determined by the superior authorities, indicating that leadership transfers may be a designed practice in routine bureaucratic management (Yi et al. 2024). Based on these considerations, we can assume that in addition to suggested methods such as shared meals and organized social events, which can be demanding and exhausting (Keast and Mandell 2014), informal relations could also be developed from designed networks through planned leadership transfers. Indicating the facilitating effects of superior authorities on the cultivation of interlocal informal relations complements the findings of Kwon et al. (2014), who argued that regional authorities could crowd out or substitute self-organized cooperative network relations.

Network structure and benefits distribution in collaborative environmental governance

The motivation of local officials to participate in environmental collaboration may primarily derive from the expected advancement of administrative performance and political opportunity. Therefore, selective benefits (i.e., individual interest) and the distribution of benefits may be more decisive in the formation of environmental collaboration than the integral improvement of collective benefits. The network structure substantially determines the distribution of benefits in collaboration, as strong actors may dominate the collaboration process, leading to uneven distribution of discourse and benefits. We, thus, support the arguments of Ansell and Gash (2008) by offering evidence that half of the urban agglomerations that have established collaboration present a balanced power structure.

However, some researchers challenge this argument by asserting that a regional fugleman is conducive to facilitating collaboration by promoting knowledge transfer, integrating distributed resources, and seeking support from superior authorities (Liu et al. 2021).

We support this viewpoint in our finding that five of the twelve urban agglomerations established collaboration through the lead of dominant actors. We also advance the debate in two ways. Firstly, we found that in comparison to the configuration of a balanced power structure, the configurations including dominant actors were combined with the condition variables of collaboration history or shared common knowledge. This finding indicates that the facilitating effects of regional leadership are dependent on the condition of established interest relations or coordinated benefits distribution. Secondly, the results of the analysis of failing to establish a collaboration point to the urban agglomerations that have two regional leaders, but without shared common knowledge. Too many leading actors may complicate the interest relations within a network structure and consequently impede the formation of collaborative networks.

For example, in Liaoning, the collaborative initiatives of its two main cities, Shenyang and Dalian, could be undermined by constant competing interests and disparities in collaborative benefits. The difference in environmental conditions between the two cities has led to discrepancies in the input and potential benefit of collaboration and difficulty in coordinating the distribution of benefits. Nevertheless, it is also noteworthy that they separately established environmental collaboration by clustering their neighboring prefectural-level cities in 2018 (Shenyang surrounding cities) and 2019 (Dalian coastal urban belt). This kind of part collaboration was also established in Shandong and the Pearl River Delta, the other two urban agglomerations with competing regional leaders. The path to environmental collaboration within a region with an imbalanced power structure and competitive interest relations appears to be through restating the tactical sub-regionalism that is based on partially integrated benefits and orientation rather than attempting to collaborate on a huge scale (Schafran 2014).

Conclusion

This study performs a configurational analysis of the relationship between collaborative conditions and practices in China. Results demonstrate that environmental collaboration cannot be established without the conditions of informal intergovernmental relations and the intervention of superior authorities. Based on the concurrence of these two conditions, urban agglomerations could establish collaboration by further combining balanced power structures or combining a dominant actor and a collaboration prehistory. Our findings evoke theoretical and practical implications in the following ways:

1. Higher-level authorities can intervene both institutionally and non-institutionally. Although personalized, campaign-style superior political intervention could be effective in temporarily motivating collaborative action, it could be insufficient due to its lack of certainty and consistency. Therefore, although non-institutional interventions can effectively trigger intergovernmental collaboration, the sustainability of such collaboration depends on institutional interventions. Upon initiating

collaboration, policymakers ought to implement a range of institutionalized mechanisms, including regulations on opportunistic behavior and transparency of information, to alleviate the policy fluctuations and inconsistency brought by leadership rotation.

2. This study demonstrates the necessity and sufficiency of informal intergovernmental relations in interlocal environmental collaboration. Moreover, informal and self-organized networks are not necessarily formed by potentially demanding and exhausting building methods, such as shared meals and organized social events, but could also be developed from designed networks through planned leadership transfers. Policymakers at the superior level ought to focus on the cultivation of social capital, which constitutes the fundamental basis for intergovernmental collaboration, by deliberately facilitating official exchanges among diverse jurisdictions and strengthening cooperative ventures in joint events.
3. This research advances the debate on the controversial impact of power imbalance in two ways. On one hand, the achievement of regional leaders in initiating collaboration is on the condition of established interest relations or coordinated benefits distribution. On the other hand, urban agglomerations with two or more leading actors have difficulty in establishing collaboration due to increasing competing interlocal relations. In this regard, a tactical sub-regionalism based on partially integrated benefits and preferences is suggested to pave the way for feasible collaborative practice.

This study recognizes several limitations that deserve consideration. First, our examination of antecedent factors is embedded within China's distinct context, which may restrict the generalizability of our conclusions to other political and cultural environments. To address this limitation, future research endeavors could employ a multi-national, cross-comparative framework to investigate how varying governance systems influence collaborative outcomes. Secondly, while the QCA utilized in this study offers valuable insights, it has certain limitations in capturing the dynamic evolution of influencing factors. Consequently, a longitudinal study is warranted to examine the long-term sustainability of collaboration, shedding light on the enduring influence of various conditional factors that facilitate environmental collaborations.

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SAŁYGINĖS KONFIGURACIJOS TARPVYRIAUSYBINIAM
BENDRADARBIAVIMUI APLINKOSAUGOS SRITYJE MIESTŲ
AGLOMERACIJOSE

Anotacija. Šis tyrimas tiria, kaip sąlyginiai elementai kartu skatina tarpvyriausybę (centrinį ir vietinį lygį) bendradarbiavimo veiklą, susijusią su oro taršos kontrole Kinijos miestų aglomeracijose. Taikant daugiareikšmę kokybinę lyginamąją analizę, išvados rodo, kad tam bendradarbiavimui aplinkosaugos srityje reikalingos dvi būtinos sąlygos: neformalūs tarpvyriausybinių santykiai ir aukštesnių valdžios institucijų įsikišimas kartu su subalansuotomis galios struktūromis arba bendradarbiavimo patirties panaudojimas. Be to, lyginamoji analizė rodo, kad, pirma, nors personalizuotas, neinstitucionalizuotas aukštesnio valdžios lygio įsikišimas gali būti veiksmingas inicijuojant bendradarbiavimą, taip pat turėtų būti taikomi institucionalizuoti mechanizmai, siekiant paspartinti sukurtų organizacijų formavimąsi ir sušvelninti politikos neatitikimus, atsirandančius dėl vadovų rotacijos. Antra, ilgalaikiam bendradarbiaujančiam aplinkos valdymui reikalingos neformalių tarpvyriausybinių santykių ir savarankiškai organizuotų tinklų sąlygos, kurios tradiciškai kuriamos iš sukurtų tinklų per suplanuotą vadovybės perdavimą. Trečia, tarp Kinijos vietos valdžios institucijų selektyvinė nauda (t. y. individualūs interesai) ir naudos paskirstymas gali būti labiau lemiamas formuojant bendradarbiavimą aplinkosaugos srityje nei visapusiškas kolektyvinės naudos gerinimas. Taip pat būtina, kad taktinis subregionizmas, pagrįstas iš dalies integruota nauda ir pirmenybėmis, sumažintų bendradarbiavimo sandorių sąnaudas, ypač miestų aglomeracijose, kuriose dominuoja du ar daugiau lyderių.

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